

**CONCEPTUAL STUDY OF MEDO DUSHTI W.S.R. TO DYSLIPIDEMIA****Dr. Suchita Singh\*<sup>1</sup>, Dr. Nikhila Ranjan Nayak<sup>2</sup> and Dr. Aaradhana Kande<sup>3</sup>**<sup>1</sup>M.D. Scholar, Post Graduate Dept. of Roga Nidana avum Vikriti Vigyan, Govt. Ayurveda College, Raipur, Chhattisgarh.<sup>2</sup>Professor and HOD, Post Graduate Dept. of Roga Nidana avum Vikriti Vigyan, Govt. Ayurveda College, Raipur, Chhattisgarh.<sup>3</sup>Lecturer, Post Graduate Dept. of Roga Nidana avum Vikriti Vigyan, Govt. Ayurveda College, Raipur, Chhattisgarh.**\*Corresponding Author: Dr. Suchita Singh**

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**ABSTRACT**

India is in grip of epidemic Medo roga as Indian economy grows. The food we take in daily life contribute to our well being. But the desire of many peoples to eat more and work out less is causing the Medo roga very rapidly. In present era, life style modification and use of more and more junk food with stressful life helping obesity tree to propagate. Recent studies have reported that high cholesterol is present in 25-30% of urban and 15-20% rural subjects. This prevalence is lower than high income countries. This ill effect of health may be responsible for various life style disorders like dyslipidemia, hyperlipidemia, malnutrition, osteoarthritis etc. Dyslipidemia is the serious life style diseases in Today era of fast and furious life. It has been well described about the consequences of Medo vikriti and its hazards in our classics. Medoroga is mainly imbalance of agni because of various etiological factors, etiological factor may be Aaharatmak, Viharatmak, Mansik and others like Bijswabhava (hereditary). In Ayurveda classics there is no such term like Dyslipidemia is described but the properties of sneha dravya like Medodhatu in Ayurveda.

**KEYWORDS:** Medoroga, lower middle income countries, Lifestyle disorders, Dyslipidemia, Etiology.**INTRODUCTION**

Dyslipidemia is a disorder of disturbed lipid metabolism involving abnormality in any or all the lipoprotein in blood. Dyslipidemia may be manifested by elevation of the total cholesterol, the bad low density lipoprotein (LDL) cholesterol and the triglyceride concentration and decrease in the good high density lipoprotein (HDL) cholesterol concentration in the blood. According to ICMR-INDIAB study, the prevalence of Hypercholesterolemia was 13.9%, of hypertriglyceridemia was 29.5%, of low HDL-C was 72.3%, and of high LDL-C levels was 11.8%. In Dyslipidemia, circulating level of lipids or lipoprotein fraction are abnormal because of genetic or environmental condition that after the production, catabolism on clearance of plasma lipoprotein from the circulation.<sup>[1]</sup> Dyslipidemia may be classified according to which lipoprotein level are abnormal, as in the Fredrickson classification system. According to NCEP ATPII guidelines.<sup>[2]</sup> Hyperlipidemia is defined as total cholesterol (TC) > 200 mg/dl and LDL > 100 mg/dl. Hyper triglyceridemia as TG > 150 mg/dl, HDL Cholesterol (HDL-C) < 40 mg/dl.<sup>[3]</sup> The dyslipidemia most clearly associated with increased risk of CAD (coronary artery disease) is hyper cholesterolemia

particularly elevated plasma level of cholesterol carried in LDL.

In ayurvedic review, According to Acharya Charaka continuous intake of causative factors aggravate kapha dosha and Medodhatu due to similar properties and this increased meda obstructs the srotas, because of this obstruction vata moving in kosta becomes hyperactive and stimulates agni.<sup>[4]</sup> This agni digest the food rapidly or vitiated or hyperactive vata absorb it rapidly. So a person requires frequent and heavy food and if not available this increased vata and agni tender to reproduce severe complications. According to Acharya sushruta there are two stages of pathogenesis in sthoulya one is formation of meda from madhura Anna rasa, which is formed by excessive intake of causative factors and due to Atisnigdha Guna of madhur rasa. There is formation of only meda dhatu at the cost of other Dhatus. Next is obstruction of srotas due to increase meda.<sup>[5]</sup> According to Acharya Vagbhatta, the etiological factors which contain mainly kapha and medansadharmi Ansha in excess produce kapha Bhuyishita Dosha Vriddhi. That dosha vridhi due to its agni Vikriti as a results the Ama goes directly to Medodhatu and mixed with kapha at the tissue level and causes increase of meda dhatu

simultaneously the srotas will be blocked and the vata moving in the kostha causes increase of meda dhatu causes increases of Jatharagni which results excessive hunger, which in turn leads excessive intake and results medoroga.<sup>[6]</sup>

### AIMS AND OBJECTIVES

- To study the etiology, symptoms, pathology of Medodhatu dushti w.s.r. to dyslipidemia.

### MATERIALS METHODS

- To study and compile all the references of medo roga and dyslipidemia from all Ayurvedic text, modern text and electronic database.

### Etiology

#### Nidana (Causative Factors)

In Ayurvedic literature, various acharyas have mentioned so many aetiological factors of Medo dushti. The hereditary component (Bijadosha) besides Aharatmaka, Viharatmaka and Manasa factors in causation of Medo dushti have been described by Acharya Charaka (Ch. su. 21/3). They are mostly exogenous types, but endogenous type of cause has been mentioned by Acharya Sushruta and Acharya Vagbhata. Vagbhata has also mentioned 'Ama' as a causative factor, besides other components.

In brief, all causative factors described in Ayurveda can be classified into four groups.

- 1) Aharaja
- 2) Viharaja
- 3) Manasik
- 4) Anya

For better understanding these causes are being tabulated as follow:

#### Aharaja Nidana

Ahartmak nidan	Ch.	Su.	A.S.	A.H.	Mn.	B.P.
Ati samparana (Over eating)	+	-	+	-	-	-
Samtarpana	+	-	+	+	-	-
Adhyashana	-	+	-	-	-	-
Guru Ahara sevana (Excessive consumption of Heavy food)	+	-	+	+	-	+
Madhura Aharasevana (Excessive consumption of sweet food)	+	-	+	+	-	+
Sheeta Aharasevana (Excessive consumption of cold diet)	+	-	-	-	-	-
Snigdha Aharasevana (Excessive consumption of unctuous food)	-	-	+	+	-	+
Sleshmala Aharasevana (Kapha increasing food)	+	+	-	-	+	+
Navannasevana (Usage of fresh grains)	+	-	-	-	-	+
Nava Madya sevana (Usage of fresh alcoholic preparation)	+	-	-	-	-	-
Gramya Rasasevana (Usage of domestic animal's meat & soups)	+	-	-	-	-	-
Mamsa sevana (Excessive use of meat)	+	-	+	+	-	-
Payasa Vikar sevana (Excessive usage of milk and it's preparations)	+	-	+	+	-	-
Dadhi Sevana (Excessive use of curd)	+	-	-	-	-	-
Sarpi sevana (Usage of Ghee)	+	-	-	+	-	-
Ikshu Vikara sevana (Usage of sugarcane's Preparations)	+	-	-	+	-	-
Guda Vikara sevana (Usage of jaggery's preparations)	+	-	-	-	-	-
Shali sevana (Excessive use of Rice)	+	-	-	-	-	-
Godhum sevana (Excessive use of wheat)	+	-	-	-	-	-
Masha sevana (Usage of phasilous mungo)	+	-	-	-	-	-
Rasayana Sevana	+	-	-	-	-	-
Vrishya Sevana	+	-	-	-	-	-
Bhojanotara Jal-pana	-	-	+	-	-	+

#### Viharaj nidan

Avyayama (Lack of physical exercise)	+	+	+	-	+	+
Avyavaya (Lack of sexual life)	+	-	+	-	-	-
Divaswapa (Day's sleep)	+	+	+	-	+	+
Asana Sukha (Luxurious sitting )	+	-	+	+	-	-
Swapnaprasangat (Excessive sleep)	+	-	+	+	-	-
Gandhamalyanu Sevana (Using of perfumes garlands)	+	-	-	-	-	-
Bhojanotar Snana (Bathing after taking the meals)	+	-	-	-	-	-
Bhojanotar Nidra (Sleeping after meal)	-	-	-	-	-	+
BhojanotarAushadha sevana (Drugs after meal)	-	-	+	-	-	-

**Manshik nidan**

<b>Manasika Nidana</b>	<b>ch</b>	<b>Su.</b>	<b>A.s.</b>	<b>A.h.</b>	<b>Mn.</b>	<b>b.p.</b>
Harshnityatvat (Uninterrupted cheerfulness)	+	–	+	+	–	–
Achintanat (Lack of anxiety)	+	–	+	+	–	–
Manasonivritti (Relaxation from tension)	+	–	+	+	–	–
Priyadarshana (Observations of beloved things)	+	–	–	–	–	–
Saukhyena	–	–	–	+	–	–

**Anya nidan**

<b>Anya Nidana</b>	<b>Ch.</b>	<b>Su.</b>	<b>A.s.</b>	<b>A.h.</b>	<b>Mn.</b>	<b>B.p.</b>
Amarasa	–	+	–	–	–	+
Snigdha Madhura Basti Sevana (Administration of unctuous & Sweet enema)	+	–	–	–	–	–
Tailabhyanga (Massaging of oil)	+	–	+	+	–	–
Snigdha Udvartana (Unctuous unction)	+	–	–	–	–	–
Bijadoshasvabhavat (Heridity)	+	–	–	–	–	–

**Symptoms**

The symptoms of atisthoulya as consider as Medo roga. Person can be diagnosed as ati sthoulya when his buttocks, abdomen & breasts begin to show movement due to excess accumulation of Meda in these areas. Contrary to his age there is a disproportionate in relation to build & enthusiasm.

Kustha, visharpa, Bhagandara, Jwara, Atisara, prameha, Arsha, Slipada, Apachi, Kamala may develop in medo dhatu dushti. Due to the bad smell minute worms may develop in the skin (B.P.M.39/9-1).

<b>Rupa</b>	<b>Ch.</b>	<b>A.S.</b>	<b>Mn.</b>	<b>A.H</b>	<b>Mn.</b>	<b>B.P.</b>
Chala Sphika (Pendulous Buttock)	+	–	+	+	+	+
Chala Udara (Pendulous Abdomen)	+	–	+	+	+	+
Chala Stana (Pendulous Breast)	+	–	+	+	+	+
Ayatha Upachaya (Abnormal growth of the body)	+	–	+	–	+	+
Udara parshva vridhhi (enlargement of abdomen)	–	+	–	+	+	+
Anutsaha (Lack of Enthusiasm)	+	–	+	–	+	+
Alasya (Laziness)	–	–	+	–	–	–
Moha	–	–	–	–	+	+
Javoparodha (Lack of agility)	+	–	–	–	–	–
Alpa vega Shrama	–	–	–	+	–	–
Sarvakriyasu Asamrthata (Unable to bear the any physical exercise.)	–	+	–	–	+	+
Alpa Bala	–	–	+	–	–	–
Daurbalya (General weakness)	+	–	+	–	–	–
Ayushohrras (Shortening of the life span)	+	–	+	–	–	+
Alpa Vyavaya (Lack of sexual life)	–	+	–	–	+	+
Daugandhya (Foetid odour of body)	+	+	+	–	+	+
Sved - abadha (Excessive sweating)	+	–	+	–	–	+
Kshudhatimatra (Ecessive hunger)	+	+	+	–	+	+
Pipasatiyoga (Ecessive Thirst)	+	+	+	–	+	+
Nidradhikya (Ecessive Sleep)	–	+	+	–	+	+
Kshudra Swasa (Dyspnoea on exertion)	–	+	+	+	+	+
Krathana	–	+	–	–	+	+
Alpa Prana (Low vitality power)	–	+	+	–	+	+
Gadgadvani (Indistinctness of Speech)	–	+	+	–	–	–
Gatrasada ( Prostration of the Body)	–	+	–	–	+	+
Saukumarata (Delicacy)	+	+	–	–	–	–

**Pathogenesis**

Due to etiological factors kapha dosha become aggravated and food remains uncooked and turns to more sweet, this rasadhatu circulating throughout the body

produces Medas because of its unctuousness is known as medo dushti.

Abdomen and bones are the chief depository of meda, the belly gets enlarged in such individuals. The channels

of vata become obstructed by the increased meda inside the abdomen; Vata then begins to act vigorously inside the Maha srotas as a result agni becomes powerful leading to voracious hunger and craves for more quantity of food. In due course of time more distressing condition prevails. Combination of both agni and vata are more harmful just as forest fire destroys the forest, these destroy the body. Due to enhancement of meda all the three dosas become aggravated and cause many serious complication including death.

### Dyslipidemia

- Disorder of Lipid & Lipoprotein Metabolism
- A common form of Dyslipidemia is characterized by three lipid abnormalities:
  1. Elevated triglycerides.
  2. Elevated LDL.
  3. Reduced HDL cholesterol.

### Risk Factor

Important Modifiable Risk Factor for Dyslipidemia  
Several behaviours can lead to dyslipidemia.

- Cigarette smoking
- Obesity and sedentary lifestyle
- Consumption of foods high in saturated fat and trans fat
- Excessive alcohol consumption may also contribute to higher triglyceride levels.
- Genetical cause
- Advanced age.

### Types of Dyslipidemias

Dyslipidemia is divided into primary and secondary types.

1. Primary - Inherited
2. Secondary - Acquired

Among the specific types of primary dyslipidemia are-

- Familial combined dyslipidemia
- Familial hypercholesterolemia
- Familial hyperapobetalipoproteinemia

### Symptom

- High blood pressure
- Coronary artery diseases
- Diabetics
- PAD(pulmonary artery disease)
- Obesity
- Abdominal pain
- Acute pancreatitis
- Chronic kidney disease
- Chest pain
- Stroke
- Dizziness
- Calf muscle pain during walking
- Dyspnea
- Confusion.

### Diagnosis

- Lipid profile (Blood test for LDL, HDL, and Triglyceride)

### Prevention

- Following heart-healthy diet
- Exercise regularly
- Quit smoking

### CONCLUSION

Dyslipidemia involves abnormal body, there are many tissues which are rich in lipids, vitiated medo dhatu has significant role in developing many metabolic disorder. Etiological factors, signs and symptoms mentioned for medoroga are almost similar to dyslipidemia. Agni is responsible for all metabolic activities of the body. The pathology of medodhatwagni mandya leads excess homologues poshak MedoDhatu in circulation. Which can be referred to the condition such as dyslipidemia. Treatment option depends on the specific lipid abnormality.

There is no precise term for dyslipidemia in the Ayurvedic classics. Literatures shows that scholars that have tried to use distinct nomenclature for dyslipidemia.

Ayurvedic concept has been applied to biomedically defined clinical entities such as dyslipidemia these theories has been applied to conceptualize the etiology and pathogenesis of the dyslipidemia, which includes Medo Dhatu dusthti.

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